Act on the Prohibition of Chemical Weapons and on Control of Toxic Chemicals and the Precursors thereof Promulgated, SG, No. 8/28.01.2000, amended, SG, No. 75/2.08.2002, effective 3.09.2002, SG No. 11/2.02.2007, SG No. 82/16.10.2009, effective 16.10.2009

Text in Bulgarian: Закон за забрана на химическото оръжие и за контрол на токсичните химически вещества и техните прекурсори

Chapter One

## GENERAL PROVISIONS

Article 1. This Act shall regulate:

- 1. the prohibition on the development, production, stockpiling and use of chemical weapons;
- 2. the conditions and procedure of activities involving toxic chemicals and their precursors which are subject of international control under the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction.
- Article 2. Any activities involving toxic chemicals and their precursors under Article 1, subparagraph 2 shall be controlled by the State with a view to protecting the national security and interests of the country, strengthening international confidence and stability and implementing the international obligations of the Republic of Bulgaria under the Convention.
- Article 3. (1) The State may introduce restrictions and impose bans on any activities under Article 1, subparagraph 2 where these activities are at variance with the objectives specified under Article 2.
- (2) The toxic chemicals and their precursors to which the regime under paragraph 1 shall be applicable, are listed in the Annexes to this Act.

Chapter Two

## PROHIBITION OF CHEMICAL WEAPONS

Article 4. It shall be prohibited:

- 1. to develop, produce, acquire, stockpile, possess, retain or transfer chemical weapons;
- 2. to use chemical weapons;
- 3. to engage in any military preparations to use chemical weapons;
- 4. to use chemical weapons for the purpose of law enforcement as a method of warfare;
- 5. to assist, encourage or induce any activities prohibited under subparagraphs 1 to 4. Chapter Three

## REGIME FOR ACTIVITIES INVOLVING TOXIC CHEMICALS AND THEIR

#### **PRECURSORS**

- Article 5. (1) It shall be allowed to develop, produce, acquire, retain, transfer and use toxic chemicals and their precursors indicated in the annexes for:
  - 1. industrial, agricultural, research, medical, pharmaceutical and other peaceful purposes;
  - 2. protective purposes directly related to protection against toxic chemicals and protection against chemical weapons;
- 3. military purposes which are not connected with the use of chemical weapons and do not depend on the use of toxic properties of chemicals as a method of warfare.
- (2) During activities under paragraph 1, the individuals involved shall take measures to ensure the safety of people and protection of the environment.
  - Article 6. (1) Schedule 1 chemicals shall be produced, acquired, retained or used in cases where:

- 1. these activities are carried out on the territory of the Republic of Bulgaria or on the territory of another State Party;
- 2. chemicals are applied to research, medical, pharmaceutical or protective purposes;
- 3. the type and quantities of chemicals are strictly limited to those which may be used for the purposes under subparagraph 2;
- 4. the aggregate amount of chemicals used for the purposes under subparagraph 2 at any given time is equal to or less than 1 tone;
- 5. the aggregate amount of chemicals for the purposes under subparagraph 2 acquired in any calendar year through production or importation is equal to or less than 1 tone;
- (2) The production of Schedule 1 chemicals for research, medical, pharmaceutical or protective purposes may be carried out at a single small- scale facility.
- (3) The production of Schedule 1 chemicals for protective purposes in aggregate quantities not exceeding 10 kilograms per calendar year may be carried out at another facility different from the facility under paragraph 2.
- (4) Production of Schedule 1 chemicals for research, medical or pharmaceutical purposes in quantities of more than 100 grams per calendar year may be carried out at other facilities different from the facility under paragraph 2 in aggregate quantities not exceeding 10 kilograms per year per facility.
- (5) Synthesis of Schedule 1 chemicals for research, medical or pharmaceutical purposes may be carried out at laboratories in aggregate quantities less than 100 grams per calendar year per laboratory.
- (6) (Amended, SG No. 11/2007) Schedule 1 chemicals shall be produced on the basis of registration for manufacture with the Interdepartmental Commission for Export Control and Non-Proliferation of Weapons for Mass Destruction with the Minister of Economy, Energy and Tourism pursuant to the Arms and Dual-Use Items and Technologies Export Control Act, referred to hereinafter the "Interdepartmental Commission"
- Article 7. (Amended, SG No. 11/2007) (1) Production, processing or use of chemical weapons specified in Annex No. 2 in quantities which are greater than:
  - 1. one kilogram of the chemical substance marked with "\*" in Part A;
  - 2. one hundred kilograms of any other chemical substance of Part A;
  - 3. one ton of a chemical substance of Part B,

shall be done on the basis of a registration for production, processing or use with the Interdepartmental Commission.

- (2) The production of a chemical substance specified in Annex No. 3 in a quantity exceeding 30 tons shall be done on the basis of a registration for production with the Interdepartmental Commission.
- Article 8. (Amended, SG No. 11/2007) (1) Production through synthesis of organic chemical substances not specified in the annexes with a total quantity of the substances produced in excess of 200 tons per calendar year shall be done on the basis of a registration for production with the Interdepartmental Commission.
- (2) Production through synthesis of an organic chemical substance containing phosphorus, sulphur or fluorine with a quantity of the substance produced in excess of 30 tons per calendar year shall be done on the basis of a registration for production with the Interdepartmental Commission.
- Article 9. (Amend. SG, No. 75/2002, SG No. 11/2007) (1) Production, processing or use registration certificates under articles 6, 7 and 8 shall be issued by the Interdepartmental Commission for a three-year term after the expiry of which any subsequent registration shall be done for the same term.
- (2) The persons under articles 6, 7 and 8 applying for production, processing or use registration shall present to the Interdepartmental Commission documents under terms and procedures specified in a regulation of the Minister of Economy, Energy and Tourism.

- (3) The issue of a production, processing or use registration certificate shall be denied and the issued certificate shall be terminated when:
- 1. the required information for the issue has not been presented or the presented information is incomplete or inaccurate;
  - 2. the terms under which the certificate was issued have not been met;
  - 3. there are circumstances contradicting the objectives under article 2.
  - (4) State fees shall be paid for registration for production, processing or use under this act.
- Article 10. (Amended, SG No. 11/2007) (1) Exports, imports and transfer of toxic chemical substances and their precursors specified in the annexes shall be done in compliance with the requirements herein and pursuant to the Arms and Dual-Use Items and Technologies Export Control Act.
- (2) Exports, imports and transfer from and to the territory of the Republic of Bulgaria of chemical substances from Annex No. 1 shall be permitted when:
  - 1. the end-user is located on the territory of the Republic of Bulgaria or on the territory of another state-party;
  - 2. the end-use is for industrial, agricultural, research, medicinal and protective purposes.
  - (3) re-export of chemical substances from Annex No. 1 shall be prohibited.
- (4) exports, imports and transfers from the territory of the Republic of Bulgaria to states in the Community of chemical substances from Annex No. 2 shall be permitted when the end-use is for purposes not prohibited by the Convention.
- (5) Exports and re-exports of chemical substances from Annex No. 2 shall be permitted only if the end-user is on the territory of another state-party;
- (6) Exports, imports and transfers from the territory of the Republic of Bulgaria to states in the Community of chemical substances from Annex No. 3 shall be permitted when the end-use is for purposes not prohibited by the Convention.
- (7) In case of transfer for the territory of the Republic of Bulgaria from states from the Community of chemical substances from Annex No. 2 and 3 the Bulgarian natural or legal person shall be obliged within seven days before performing the transfer to present to the Interdepartmental Commission documents under terms and procedures specified in a regulation of the Minister of Economy, Energy and Tourism.
  - (8) The Interdepartmental Commission may require additional information under this article. Chapter Four

#### AUTHORITY RESPONSIBLE FOR THE IMPLEMENTATION OF THE

## **CONVENTION**

Article 11. (Amended, SG, No. 75/2002, SG No. 11/2007) The body for coordination of the work and control over the implementation of the Convention by the Republic of Bulgaria and for exercising control and authorisation functions on the implementation of this act shall be the Interdepartmental Export Control and Weapons of Mass Destruction Non-Proliferation Interdepartmental Commission with the Minister of Economy, Energy and Tourism pursuant to the Arms and Dual-Use Items and Technologies Export Control Act.

Article 12. The Interministerial Commission shall have the following main functions and tasks:

- 1. To submit declarations to the Organization for the Prohibition of Chemical Weapons concerning:
- a) the absence, in the territory of the Republic of Bulgaria, of chemical weapons, old and abandoned chemical weapons and facilities for production of chemical weapons;

- b) the chemicals used to for the purposes of law enforcement including riot control;
- c) activities involving toxic chemicals and their precursors indicated in the annexes, and those involving organic chemicals;
  - d) the national program for protective purposes.
  - 2. To ensure the conduct of inspections at facilities in the territory of the Republic of Bulgaria;
- 3. To realize the international cooperation of the Republic of Bulgaria with the Organization for the Prohibition of Chemical Weapons and other State Parties.
- 4. To provide information and hold consultations with other State Parties or to present explanations before the Executive Council of the Organization for the Prohibition of Chemical Weapons on any issue which has raised any doubt with regard to compliance with the Convention on the part of the Republic of Bulgaria;
- 5. To submit to the Council of Ministers draft agreements between the Republic of Bulgaria and the Organization for the Prohibition of Chemical Weapons concerning:
  - a) the legal capacity, privileges and immunities of the Organization for the Prohibition of Chemical Weapons;
  - b) activities involving inspections;
- 6. To submit to the Council of Ministers a proposal on providing assistance and protection, by the Organization for the Prohibition of Chemical Weapons, against the use of threat of use, against the Republic of Bulgaria, of chemical weapons and chemicals for law enforcement including riot control as a warfare method;
- 7. To ensure payment of the annual membership fee of the Republic of Bulgaria to the Organization for the Prohibition of Chemical Weapons;
  - 8. (Repealed, SG No. 75/02)
- 9. to ensure the application of the regime under chapter three by collection of information and conduct of verifications at facilities
  - 10. To assign a national laboratory for the purposes of fulfillment of the tasks under the Convention
- 11. To build up a communication network for liaison between the Interministerial Commission, interested ministries and institutions and the Secretariat of the Organization for the Prohibition of Chemical Weapons;
- 12. To work out and submit to the Council of Ministers draft regulations for the implementation of the Convention and of this Act;
  - 13. To submit an annual report to the Council of Ministers on the implementation of the Convention and this Act. Chapter Five

## PRESENTATION OF INFORMATION AND DATA

- Article 13. Any individual who produces, acquires, retains or uses a Schedule 1 chemical shall be required to present, twice a year not later than 1 March and 1 October information and data with regard to the type and quantities of the chemical and the facility where such activities are carried out.
- Article 14. Any individual who produces, processes or uses a Schedule 2 chemical shall be required to present to the Interministerial Commission twice a year not later than 1 March and 1 October information and data with regard to the type and quantities of the chemical and the facility where it is produced, processed or used more than:
  - 1. one kilogram of the chemical designated "\*" in Part A;
  - 2. one hundred kilograms of any other chemical listed in Part A;

3. one tone of any chemical listed in Part B.

Article 15. (Amended, SG No. 11/2007) A person producing a chemical substance from Annex No. 3 in quantities exceeding 30 tons shall be obliged to present to the Interdepartmental Commission twice a year - not later than 1 March and 1 October - information and data on the type and quantity of the chemical substance and the facility where it is being produced.

Article 16. (Amended, SG No. 11/2007) (1) A person producing through synthesis organic chemical substances not specified in the annexes in a total quantity of the substances produced in excess of 200 tons per calendar year shall be obliged to provide to the Interdepartmental Commission once a year - not later than 1 March - information and data on the type and quantity of the chemical substance and the facility where it is being produced.

- (2) A person producing through synthesis an organic chemical substance containing phosphorus, sulphur or fluorine with a quantity of the substance produced in excess of 30 tons per calendar year shall be obliged to provide to the Interdepartmental Commission once a year not later than 1 March information and data on the type and quantity of the chemical substance and the facility where it is being produced.
  - (3) Paragraphs 1 and 2 shall not apply to facilities producing only explosives and hydrocarbons. Article 17. Any individual who is engaged in any activities under Chapter Three shall be required:
- 1. To keep a separate register of these activities and preserve the production, commercial and transport documents as well as the information and data relating to these activities for a period of five years;
- 2. To comply with the provisions of Articles 6-9 under which these activities are permitted and inform, without delay, the Interministerial Commission in writing of any change;
- 3. To inform the Interministerial Commission in writing of any probability of using toxic chemicals and their precursors indicated in the annexes in violation of Chapter Two.

Article 18. (Repealed, SG No. 75/02)

- Article 19. The Ministry of Internal Affairs shall present to the Interministerial Commission information and data relating to the type and quantities of chemicals used for the purposes of law enforcement including riot control.
- Article 20. Ministries and institutions shall present to the Interministerial Commission information and data concerning their programs for protective purposes.
- Article 21. (1) Control over fulfillment of obligations by individuals engaged in activities involving toxic chemicals and their precursors shall be exercised by the Interministerial Commission by checking up the information presented and conducting verifications at the respective facilities.
- (2) The Interministerial Commission may request an unlimited access to information, documents and facilities needed for the purposes of the verification.
  - (3) A protocol on the results of the verification shall be drawn up.
  - (4) If there is evidence of an offence committed, the Interministerial Commission shall notify the Prosecutor's Office. Chapter Six

## CONDUCT OF INSPECTIONS

Article 22. (1) Control over the implementation of the obligations of the Republic of Bulgaria under the Convention shall be exercised by the Organization for the Prohibition of Chemical Weapons by conducting:

- 1. Inspections at facilities under Article 6, paragraphs 2, 3 and 4, Articles 7 to 8, Articles 13 to 16;
- 2. Challenge inspections;
- 3. An investigation in case of an alleged use of chemical weapons or an alleged use of chemicals for the purposes of law enforcement including riot control as a method of warfare.
- (2) Inspections shall be conducted by an inspection team including inspectors and inspection assistants designated by the Director-General of the Organization for the Prohibition of Chemical Weapons to conduct a particular inspection.

- (3) The inspection team shall be accompanied by an in country escort appointed by the Interministerial Commission.
- (4) The conditions and procedure of receiving, moving, accompanying and assisting the inspection team shall be defined in a regulation of the Minister of Economy, Energy and Tourism.
- Article 23. An observer of another State Party may take part in a challenge inspection at the request by that Party. The Interministerial Commission may refuse such participation.
- Article 24. Any person who owns or operates a facility, subject of inspection shall ensure access to the facility and to the necessary information as well as provide assistance to the inspection team and the in- country escort to achieve the aims of the inspection indicated in the mandate of the inspection team.
- Article 25. The in-country escort shall take measures to protect the installations, equipment and documentation of the facility subject of inspection which have no relation to the purposes of the inspection.

Chapter Seven

## ADMINISTRATIVE PENALTY PROVISIONS

- Article 26. Any individual who does not observe the requirements under Articles 13, 14, 15 and 16 shall be penalized by a fine to the extent of 10 000 up to 15 000 Levs or a property sanction to the extent of 25 000 up to 50 000 Levs.
- Article 27. Any individual who does not observe the requirements for accounting and documentation under Article 17 shall be penalized by a fine to the extent of 5 000 up to 10 000 Levs or a property sanction to the extent of 15 000 up to 25 000 Levs.
- Article 28. Any individual who does not comply with the requirements under Article 24 shall be penalized by a property sanction to the extent of 50 000 Levs.
- Article 29. Any official who does not fulfil his obligations under Articles 18, 19 or 20 shall be penalized by a fine to the extent of 10 000 up to 15 000 Levs.
- Article 30. (1) Any breaches under this Act shall be ascertained by acts drawn up by officials authorized to that effect by the Chairman of the Interministerial Commission.
  - (2) On the basis of such acts the Chairman of the Interministerial Commission shall issue punitive decrees.
- (3) Acts shall be drawn up and punitive decrees shall be issued, appealed against and implemented under the procedure of the Administrative Violations and Sanctions Act.

# SUPPLEMENTARY PROVISION

- § 1. Within the meaning of this Act:
- 1. "Convention" means the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons adopted by the Geneva Disarmament Conference on 3 September, 1992, approved by the General Assembly of the United Nations by Resolution A/47/39 of 30 November, 1992, open for signature in Paris on 13 January, 1993 and entered into force on 29 April, 1997. The Convention was signed by the Republic of Bulgaria on 13 January, 1993 and ratified on 29 June, 1994.
- 2. "Organization for the Prohibition of Chemical Weapons" means the organization established pursuant to Article VIII of the Convention.
  - 3. "State Party" means a state, which ratified the Convention before 29 April 1997 or acceded to it subsequently.
  - 4. "Chemical weapons" means the following, together or separately:
- a) toxic chemicals and their precursors, except where intended for purposes not prohibited under the Convention as long as the types and quantities are consistent with such purposes;
- b) munitions and devices specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph /a/ which would be released as a result of the employment of such munitions and devices;
- c) any equipment specifically designed for use directly in connection with the employment of such munitions and devices.

- 5. "Toxic chemicals" means:
- a) any chemical which through its chemical action on life processes may cause death, temporary incapacitation or permanent harm to humans or animals;
- b) for the purpose of implementing the Convention toxic chemicals which have been identified for the application of verification measures are listed in the annexes.
  - 6. "Precursor" means:
- a) any chemical reactant, including any key component of a binary or multicomponent chemical system, which takes part at any stage in the production by whatever method of a toxic chemical;
- b) for the purposes of implementing the Convention precursors which have been identified for the application of verification measures are listed in the annexes.
  - 7. "Old chemical weapons" means:
  - a) chemical weapons which were produced before 1925;
- b) chemical weapons produced in the period between 1925 and 1946 that have deteriorated to such extent that they can no longer be used as chemical weapons.
- 8. "Abandoned chemical weapons" means chemical weapons, including old chemical weapons, abandoned by a State Party after 1 January 1946 on the territory of another State Party without the consent of the latter.
- 9. "Chemicals used for law enforcement including riot control" means any chemical not listed in the annexes which can produce rapidly sensory irritation or disabling physical effects which disappear within a short time following termination of exposure.
  - 10. "Purposes not prohibited under the Convention" means:
  - a) industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes;
- b) protective purposes, namely those purposes directly related to protection against toxic chemicals and to protection against chemical weapons;
- c) military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare;
  - d) law enforcement including domestic riot control purposes
  - 11. "Production" of a chemical means its formation through chemical reaction
- 12. "Processing" of a chemical means a physical process, such as formulation, extraction and purification in which a chemical is not converted into another chemical.
  - 13. "Consumption" of a chemical means its conversion into another chemical via a chemical reaction.
  - 14. "Development" means research and development activities preceding the production of a chemical.
  - 15. "Acquisition" means establishment of ownership over a chemical.
  - 16. "Stockpiling" means increasing the quantity of a chemical by acquisition.
  - 17. "Storage" means establishment of a physical control over a chemical.

- 18. "Transfer" means, except a physical movement of a chemical towards or outside the national territory, as well as transfer of ownership and control over that chemical.
- 19. "Organic chemical" means any chemical belonging to the class of chemical compounds consisting of all compounds of carbon except for its oxides, sulphides or metal carbonates identifiable by chemical name, by structural formula, if known, and by Chemical Abstracts Service registry number -+ (CAS), if assigned.
- 20. "Facility" means any of the industrial sites as defined under subparagraphs "a", "b" and "c" ("plant site", "plant" or "unit"):
- a) "plant site" (works, factory) means the local integration of one or more plants with any intermediate administrative levels which are under one operational control and have common infrastructure including:
  - administration and other offices;
  - repair and maintenance shops;
  - medical center;
  - utilities:
  - central analytical laboratory;
  - research and development laboratories;
  - central effluent and waste treatment area;
  - warehouse storage.
- b) "plant" means a relatively self-contained area, structure or building containing one or more units with auxiliary and associated infrastructure, such as:
  - small administrative section:
  - storage/handling area for feedstock and products;
  - effluent/waste handling/ treatment area;
  - control/analytical laboratory;
  - first aid service/related medical section;
  - records associated with the movement of chemicals or product chemicals formed from them;
  - c) "unit" means the equipment necessary for the production, processing or consumption of a chemical.
- 21. "Single small-scale facility" means a facility for production of Schedule 1 chemicals for research, medical, pharmaceutical or protective purposes. The production at such a facility shall be carried out in reaction vessels in production lines not configured for continuous operation. The volume of such a reaction vessel shall not exceed 100 liters and the total volume of all reaction vessels with a volume exceeding 5 liters shall not be more than 500 liters.
- 22. "Challenge inspection" means the inspection of any facility or location in the territory or in any other place under the jurisdiction or control of a State Party requested by another State Party pursuant to Article IX, paragraphs 8 to 25 of the Convention.
- 23. "Investigation of an alleged use of chemical weapons or an alleged use of chemicals for law enforcement including riot control purposes as a method of warfare" means an inspection in any area of the territory of a State Party which might

be affected by an alleged use of chemical weapons or an alleged application of chemicals for law enforcement including domestic riot control purposes as a method of warfare requested by another State Party pursuant to Articles IX and X of the Convention.

- 24. "Inspection team" means the group of inspectors and inspection assistants assigned by the Director-General of the Organization for the Prohibition of Chemical Weapons to conduct a particular inspection.
- 25. "Inspector" means an individual designated by the Technical Secretariat of the Organization for the Prohibition of Chemical Weapons according to the procedures as set forth in Part II, Section A of the Annex on Implementation and Verification to the Convention on the Prohibition of Chemical Weapons to carry out an inspection or visit in accordance with the Convention.
- 26. "Inspection Assistant" means an individual designated by the Technical Secretariat of the Organization for the Prohibition of Chemical Weapons according to the procedures as set forth in Part II, Section A of the Annex on Implementation and Verification to the Convention on the Prohibition of Chemical Weapons to assist inspectors in an inspection or visit, such as medical, security and administrative personnel and interpreters.
- 27. "Inspection Mandate" means the instructions issued by the Director-General of the Organization for the Prohibition of Chemical Weapons to the inspection team for the conduct of a particular inspection.
- 28. "In-Country Escort" means individuals specified by the inspected State Party to accompany and assist the inspection team during the in- country period.
  - 29. "Ton" means metric ton, i. e. 1,000 kg.

FINAL PROVISIONS

- § 2. (Amended, SG No. 11/2007) Within three months from the entry of this Act into force the Minister of Economy, Energy and Tourism shall issue a regulation for its enforcement.
- § 3. (Amended, SG No. 11/2007) The Interdepartmental Commission shall be responsible for the enforcement of this Act.

## TRANSITIONAL AND FINAL PROVISIONS

to the Act amending and supplementing the Control of Foreign Trade

in Arms and in Potential Dual-Use Goods and Technology Act

(SG, No. 75/2002, effective 3.09.2002)

- § 23. The Act on the prohibition of chemical weapons and on control of toxic chemicals and the precursors thereof (SG, No. 8/2000) is hereby amended as follows:
- 5. The words "State/the State Commission" shall be replaced by "Interministerial/the Interministerial Commission" throughout the Act.

TRANSITIONAL AND FINAL PROVISIONS

	Arms and Dual-Use Items and Technologies Export Control Act					
	(SG, No. 11/2007)					
To	§ 5. The following amendments shall be made to the Act on the Prohibition of Chemical Weapons and on Control of xic Chemicals and the Precursors Thereof (Promulgated in the State Gazette, No. 8/2000, amended No. 75/2002):					

11. Everywhere in the act the word "Minister of Economy", "Control of Foreign Trade in Weapons and Goods and Technology with Possible Dual-Use Act" and "in a regulation adopted by the Council of Ministers" shall be replaced

respectively with "Minister of Economy and Energy", "Arms and Dual-Use Items and Technologies Export Control Act" and "in a regulation of the Minister of Economy and Energy".
TRANSITIONAL AND FINAL PROVISIONS to the Amendment Act to the Tourism Act
(SG, No. 82/2009, effective 16.10.2009)
§ 28. Everywhere in the Act on the Prohibition of Chemical Weapons and on Control of Toxic Chemicals and the Precursors Thereof (Promulgated in the State Gazette, No. 8/2000; amended No. 75/2002 and No 11/2007), the words "Minister of Economy and Energy" shall be replaced respectively with "Minister of Economy, Energy and Tourism".

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# A. Toxic chemicals: 1. O-Alkyl (<C10, incl. cycloalkyl) alkyl (Me, Et, n-Pr or i-Pr) phosphonofluoridates, (107 - 44 - 8)e.g. Sarin: O-isopropylmethylphosphonofluoridate Soman: O-pinacolylmethylphosphonofluoridate (96-64-0)2. O-Alkyl (<C10, incl. cycloalkyl) N, N-dialkyl (Me, Et, n-Pr or i-Pr) phosphoramidocyanidates, e.g. Tabun: O-ethyl N, N-dimethylphosphoramidocyanidate (77 - 81 - 6)3. O-Alkyl (H or <C10, incl. cycloalkyl) S-2-dialkyl (Me, Et, n-Pr or i-Pr) aminoethyl, alkyl (Me, Et, n-Pr or i-Pr) phosphonothiolates and corresponding alkylated or protonated salts, e.g.: VX: O-ethyl S-2-diisopropylaminoethyl methylphosphonothiolate (50782-69-9) 4. Sulphur mustards: 2-Chloroethylchloromethylsulphide (2625-76-5)Mustard gas: bis(2-chloroethyl)sulphide (505-60-2)Bis (2-chloroethylthio) methane (63869-13-6)Sesquimustard: 1,2-bis(2-chloroethylthio) ethane (3563 - 36 - 8)1,3-Bis(2-chloroethylthio)-n-propane (3563 - 36 - 8)1,4-Bis(2-chloroethylthio)-n-butane (142868 - 93 - 7)(142868 - 94 - 8)1,5-Bis(2-chloroethylthio)-n-pentane Bis(2-chloroethylthiomethyl)ether (63918 - 90 - 1)O-mustard: Bis(2-chloroethylthioethyl) ether (63918 - 89 - 8)5. Lewisites Lewisite 1: 2-chlorovinyldichloroarsine (541-25-3)(40334 - 69 - 8)Lewisite 2: bis(2-chlorovinyl)chloroarsine (40334 - 70 - 1)Lewisite 3: tris(2-chlorovinyl)arsine 6. Nitrogen mustards:

HN1: bis(2-chloroethyl)ethylamine

HN2: bis(2-chloroethyl)methylamine

HN3: tris(2-chloroethyl)amine